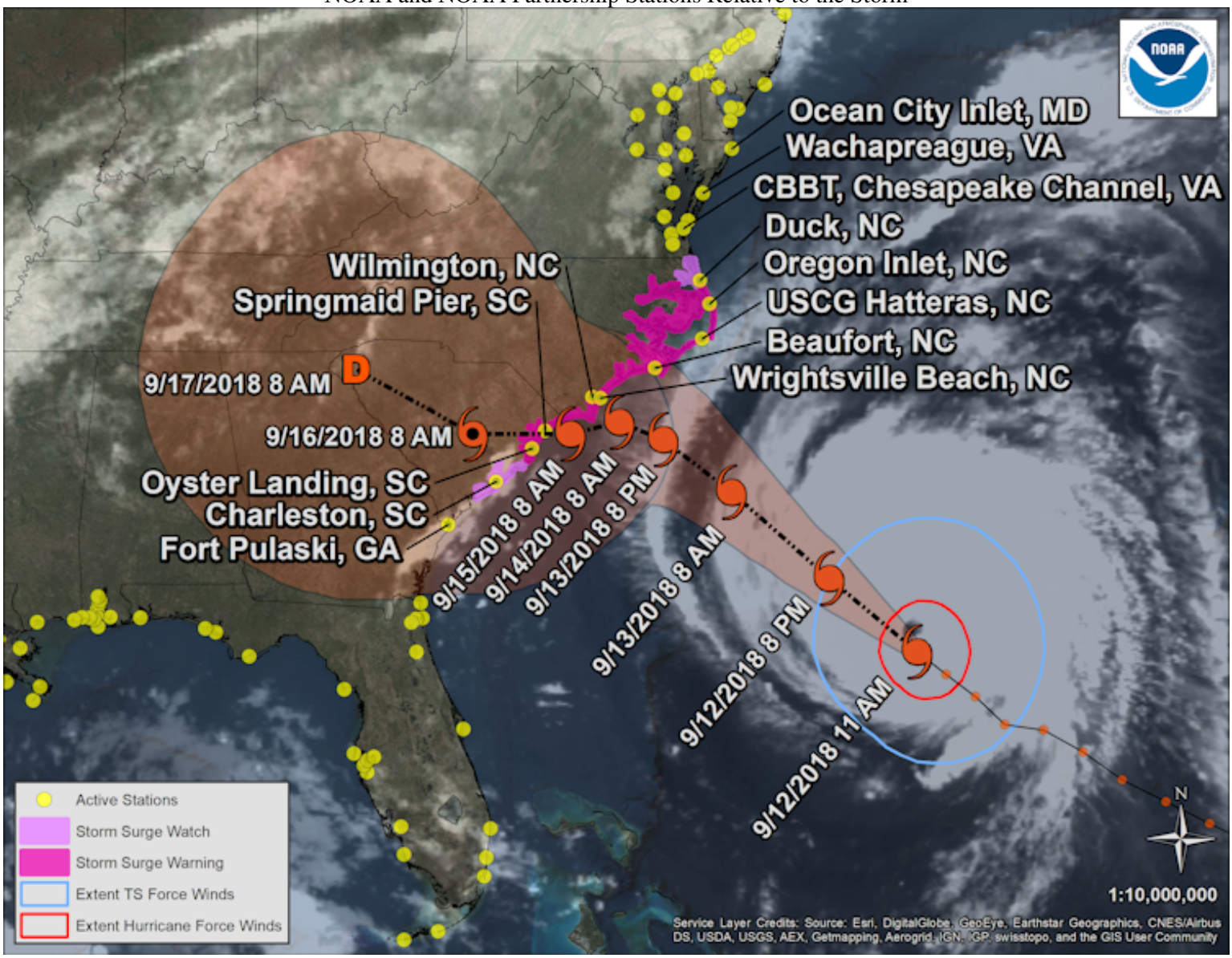
Hurricane Florence QuickLook
Posted: 12:00 EDT 09/12/2018

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 09/12/2018 12:00 EDT, water levels from Fort Pulaski, GA to Ocean City, MD continue to be slightly elevated running 1.0 foot or less above normal tide levels.

Winds are generally light in the Mid-Atlantic while breezy conditions are increasing along the North and South Carolina coastlines. Barometric pressure is holding steady or even rising gradually across the region.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional real-time and historical inundation information for select stations affected by this storm, please visit Coastal Inundation Dashboard. For additional data, please see the Center for Operational Oceanographic Products & Services website.

For more information or archived products and reports, please visit the Storm QuickLook Homepage.

Analyst: CRD

Select National Hurricane Center Advisory Information:Hurricane Florence Advisory Number 53
NWS National Hurricane Center Miami FL AL062018
1100 AM EDT Wed Sep 12 2018

...AIR FORCE HURRICANE HUNTER AIRCRAFT FINDS FLORENCE HAS CHANGED LITTLE WHILE MOVING TOWARD THE U.S. SOUTHEAST COAST...
...LIFE-THREATENING STORM SURGE AND RAINFALL EXPECTED ACROSS LARGE PORTIONS OF THE CAROLINAS AND MID-ATLANTIC STATES...

SUMMARY OF 1100 AM EDT...INFORMATION

LOCATION...29.8N 71.3W
ABOUT 485 MI...785 KM SE OF WILMINGTON NORTH CAROLINA
ABOUT 520 MI...840 KM ESE OF MYRTLE BEACH SOUTH CAROLINA
MAXIMUM SUSTAINED WINDS...130 MPH...215 KM/H
PRESENT MOVEMENT...NW OR 305 DEGREES AT 15 MPH...24 KM/H
MINIMUM CENTRAL PRESSURE...943 MB...27.85 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

None.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Storm Surge Warning is in effect for...
* South Santee River South Carolina to Duck North Carolina
* Albemarle and Pamlico Sounds, including the Neuse and Pamlico Rivers

A Storm Surge Watch is in effect for...
* Edisto Beach South Carolina to South Santee River South Carolina
* North of Duck North Carolina to the North Carolina/Virginia border

A Hurricane Warning is in effect for...
* South Santee River South Carolina to Duck North Carolina
* Albemarle and Pamlico Sounds

A Hurricane Watch is in effect for...
* Edisto Beach South Carolina to South Santee River South Carolina

A Tropical Storm Warning is in effect for...
* North of Duck North Carolina to the North Carolina/Virginia border

A Tropical Storm Watch is in effect for...
* North of the North Carolina/Virginia border to Cape Charles Light Virginia
* Chesapeake Bay south of New Point Comfort

Interests elsewhere in the southeastern and mid-Atlantic states should monitor the progress of Florence.

A Storm Surge Warning means there is a danger of life-threatening inundation, from rising water moving inland from the coastline, during the next 36 hours in the indicated locations. For a depiction of areas at risk, please see the National Weather Service Storm Surge Watch/Warning Graphic, available at hurricanes.gov. This is a life-threatening situation. Persons located within these areas should take all necessary actions to protect life and property from rising water and the potential for other dangerous conditions. Promptly follow evacuation and other instructions from local officials.

A Storm Surge Watch means there is a possibility of life-threatening inundation, from rising water moving inland from the coastline, in the indicated locations during the next 48 hours.

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. A warning is typically issued 36 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous. Preparations to protect life and property should be rushed to completion.

A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued 48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area within 36 hours.

A Tropical Storm Watch means that tropical storm conditions are possible within the watch area, generally within 48 hours.

For storm information specific to your area, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office.

DISCUSSION AND OUTLOOK

At 1100 AM EDT, reports from An Air Force Reserve reconnaissance aircraft indicate that the center of the eye of Hurricane Florence was located near latitude 29.8 North, longitude 71.3 West. Florence is now moving toward the northwest near 15 mph and this general motion, accompanied by a gradual decrease in forward speed, is expected to through Saturday. On the forecast track, the center of Florence will move over the southwestern Atlantic Ocean

between Bermuda and the Bahamas today, and approach the coast of North Carolina or South Carolina in the hurricane warning area on Thursday and Friday and move slowly near the coastline through Saturday.

The reconnaissance aircraft found that maximum sustained winds remain near 130 mph with higher gusts. Florence is a category 4 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some strengthening is forecast through tonight. While some weakening is expected to begin by late Thursday, Florence is still forecast to be an extremely dangerous major hurricane when it nears the U.S. coast on Friday.

Hurricane-force winds extend outward up to 70 miles from the center and tropical-storm-force winds extend outward up to 175 miles.

The estimated minimum central pressure is 943 mb.

HAZARDS AFFECTING LAND

STORM SURGE: The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water has the potential to reach the following heights above ground if peak surge occurs at the time of high tide...

Cape Fear NC to Cape Lookout NC, including the Neuse, Pamlico, Pungo, and Bay Rivers...9-13 ft
North Myrtle Beach SC to Cape Fear NC...6-9 ft
Cape Lookout NC to Ocracoke Inlet NC...6-9 ft
South Santee River SC to North Myrtle Beach SC...4-6 ft
Ocracoke Inlet NC to Salvo NC...4-6 ft
Salvo NC to North Carolina/Virginia Border...2-4 ft
Edisto Beach SC to South Santee River SC...2-4 ft

The deepest water will occur along the immediate coast in areas of onshore winds, where the surge will be accompanied by large and destructive waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.

RAINFALL: Florence is expected to produce heavy and excessive rainfall in the following areas...

Coastal North Carolina...20 to 30 inches, isolated 40 inches. This rainfall would produce catastrophic flash flooding and significant river flooding.

South Carolina, western and northern North Carolina...5 to 10 inches, isolated 20 inches. Elsewhere in the Appalachians and Mid-Atlantic states...3 to 6 inches, isolated 12 inches.

WIND: Hurricane conditions are expected to reach the coast within the hurricane warning area late Thursday or Friday. Winds are expected to first reach tropical storm strength on Thursday, making outside preparations difficult or dangerous. Preparations to protect life and property should be rushed to completion.

TORNADOES: A few tornadoes are possible in eastern North Carolina beginning late Thursday morning.

SURF: Swells generated by Florence are affecting Bermuda and portions of the U.S. East Coast. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

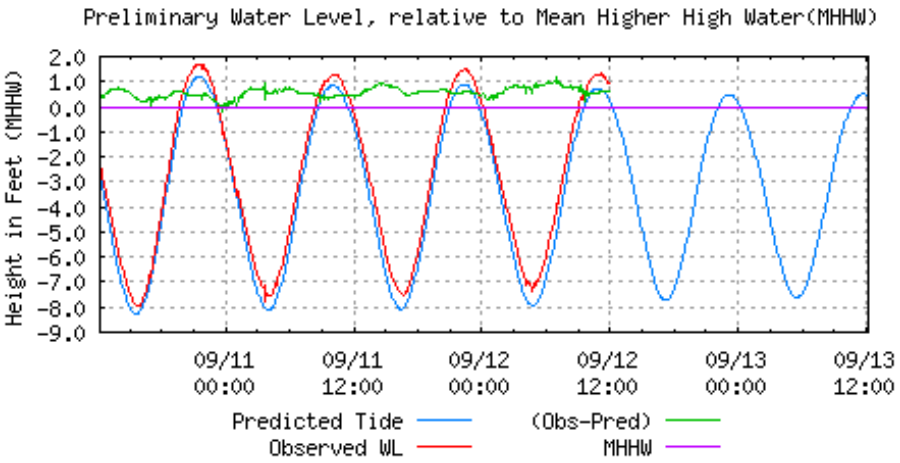
Next intermediate advisory at 200 PM EDT.
Next complete advisory at 500 PM EDT.

Forecaster Stewart

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

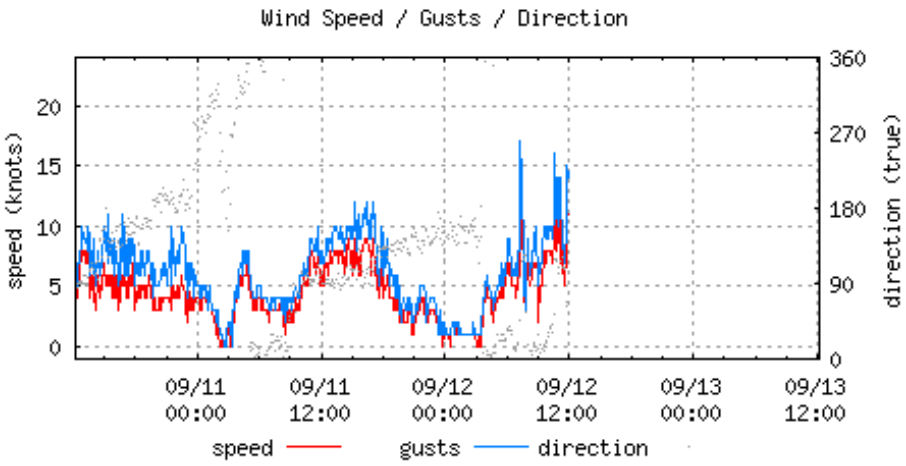
Jump to: Fort Pulaski - Water Level, Fort Pulaski - Winds, Fort Pulaski - Barometric, Charleston, Cooper River Entrance - Water Level, Charleston, Cooper River Entrance - Winds, Charleston, Cooper River Entrance - Barometric, Oyster Landing (N Inlet Estuary) - Water Level, Springmaid Pier - Water Level, Springmaid Pier - Barometric, Wrightsville Beach - Water Level, Wrightsville Beach - Winds, Wrightsville Beach - Barometric, Wilmington - Water Level, Wilmington - Barometric, Beaufort, Duke Marine Lab - Water Level, Beaufort, Duke Marine Lab - Winds, Beaufort, Duke Marine Lab - Barometric, USCG Station Hatteras - Water Level, USCG Station Hatteras - Winds, USCG Station Hatteras - Barometric, Oregon Inlet Marina - Water Level, Oregon Inlet Marina - Winds, Oregon Inlet Marina - Barometric, Duck - Water Level, Duck - Winds, Duck - Barometric, CBBT, Chesapeake Channel - Water Level, CBBT, Chesapeake Channel - Winds, CBBT, Chesapeake Channel - Barometric, Wachapreague - Water Level, Wachapreague - Winds, Ocean City Inlet - Water Level, Ocean City Inlet - Winds

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA



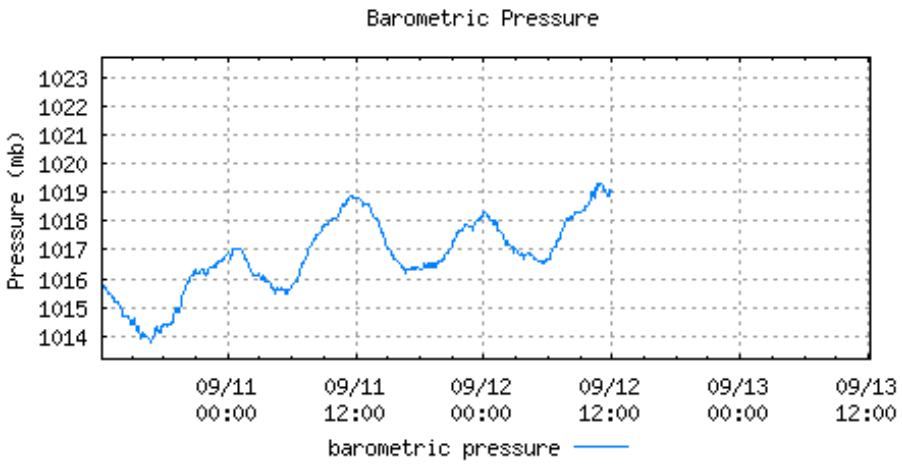
Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 0.76 ft. Predicted: 0.11 ft. Residual: 0.65 ft.
Historical Maximum Water Level: Oct 8 2016, 4.94 ft.
Next High Tide: 09/12/2018 23:08 (EDT), 0.48 ft.

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA



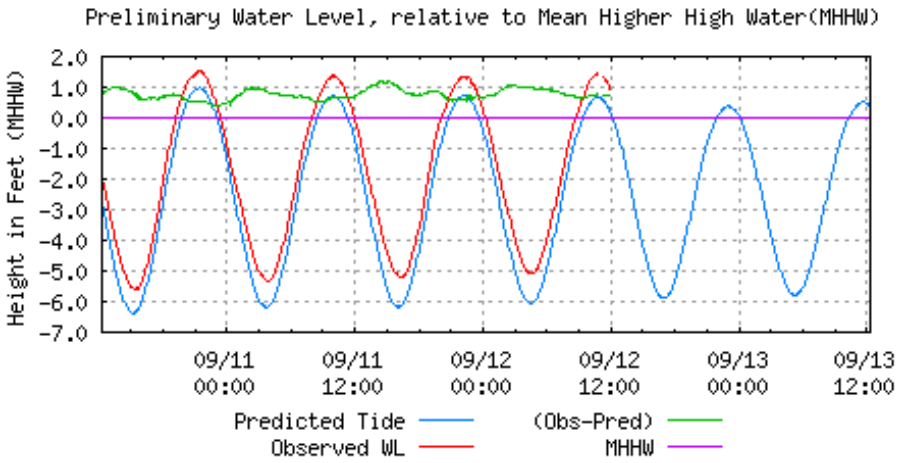
Last Observed Sample: 09/12/2018 12:06 (EDT)
Wind Speed: 10 knots Gusts: 12 knots Direction: 59° T

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA



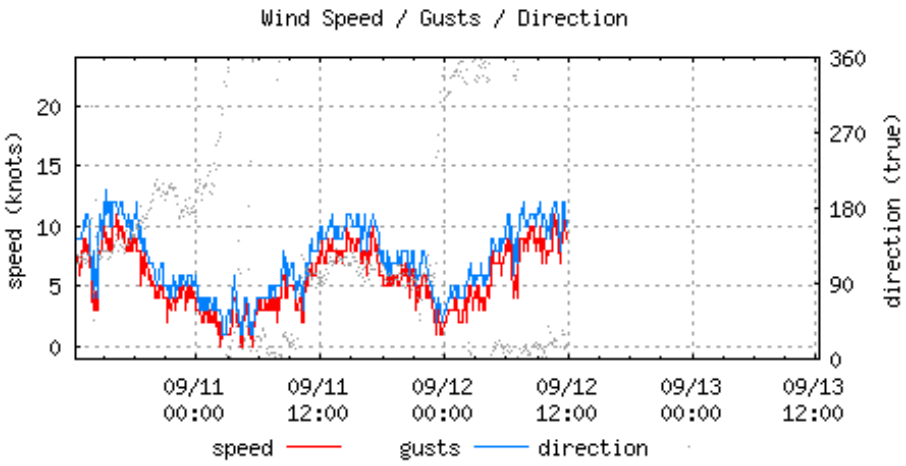
Last Observed Sample: 09/12/2018 12:06 (EDT)
Barometric Pressure: 1018.8 mb

NOAA/NOS/CO-OPS 8665530 Charleston, Cooper River Entrance, SC



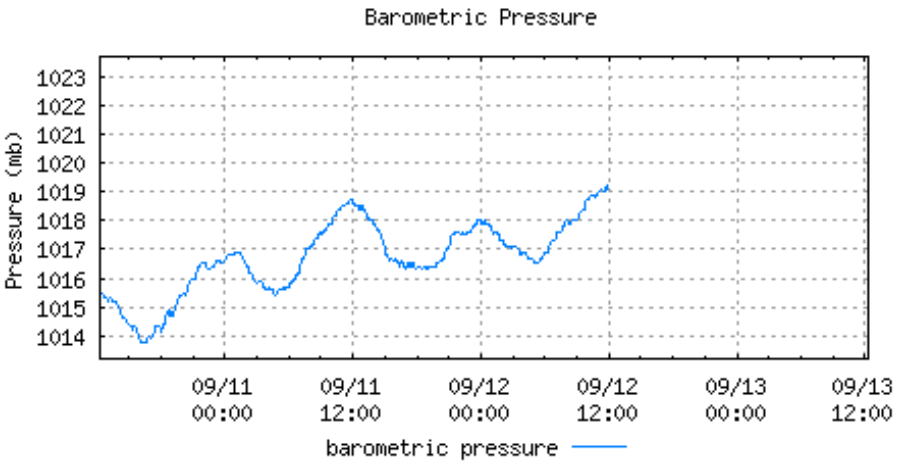
Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 0.81 ft. Predicted: 0.06 ft. Residual: 0.75 ft.
Historical Maximum Water Level: Sep 21 1989, 6.76 ft.
Next High Tide: 09/12/2018 23:00 (EDT), 0.38 ft.

NOAA/NOS/CO-OPS 8665530 Charleston, Cooper River Entrance, SC



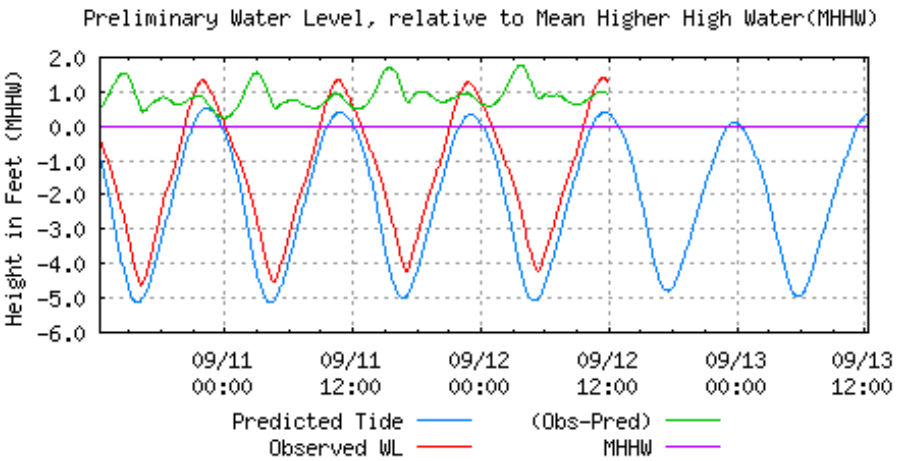
Last Observed Sample: 09/12/2018 12:06 (EDT)
Wind Speed: 7 knots Gusts: 9 knots Direction: 5° T

NOAA/NOS/CO-OPS 8665530 Charleston, Cooper River Entrance, SC



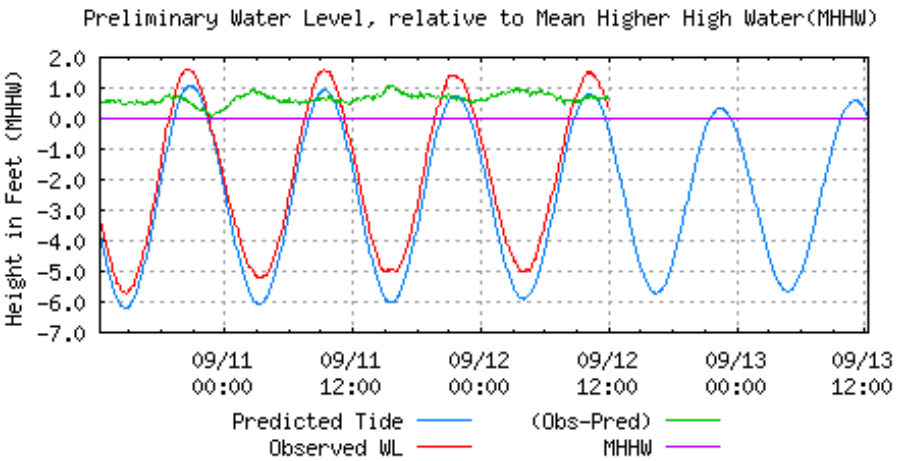
Last Observed Sample: 09/12/2018 12:06 (EDT)
Barometric Pressure: 1019.0 mb

NOAA/NOS/CO-OPS 8662245 Oyster Landing (N Inlet Estuary), SC



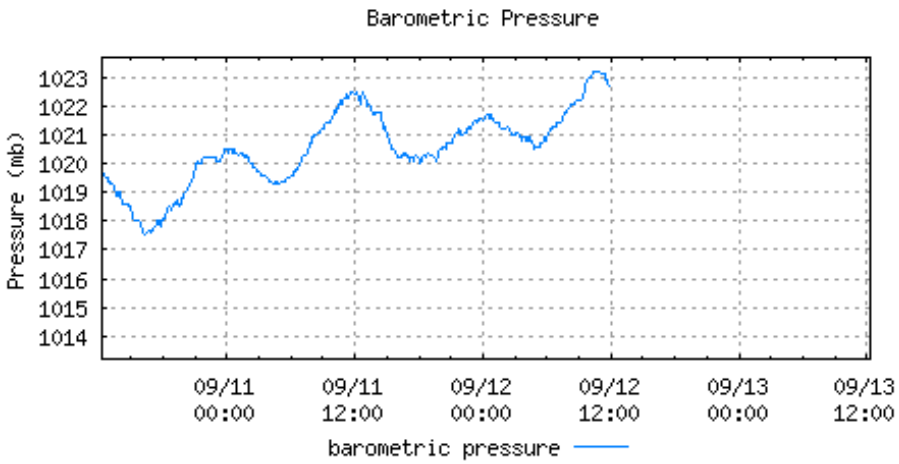
Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 1.21 ft. Predicted: 0.34 ft. Residual: 0.87 ft.
Historical Maximum Water Level: Oct 8 2016, 4.64 ft.
Next High Tide: 09/12/2018 23:45 (EDT), 0.11 ft.

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC



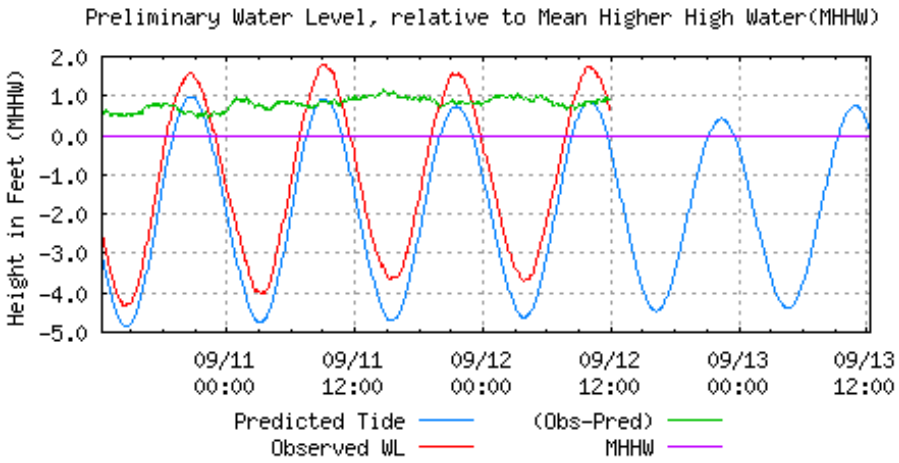
Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 0.13 ft. Predicted: -0.56 ft. Residual: 0.69 ft.
Historical Maximum Water Level: Sep 21 1989, 8.77 ft.
Next High Tide: 09/12/2018 22:26 (EDT), 0.34 ft.

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC



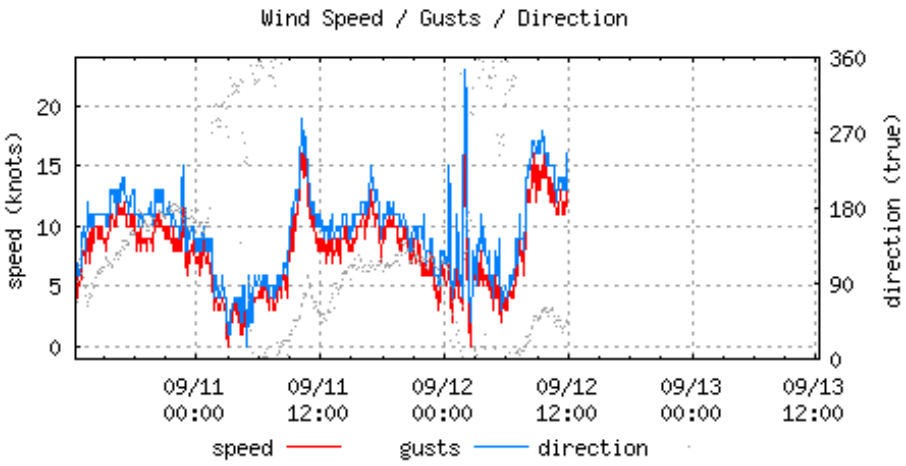
Last Observed Sample: 09/12/2018 12:06 (EDT)
Barometric Pressure: 1022.6 mb

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC



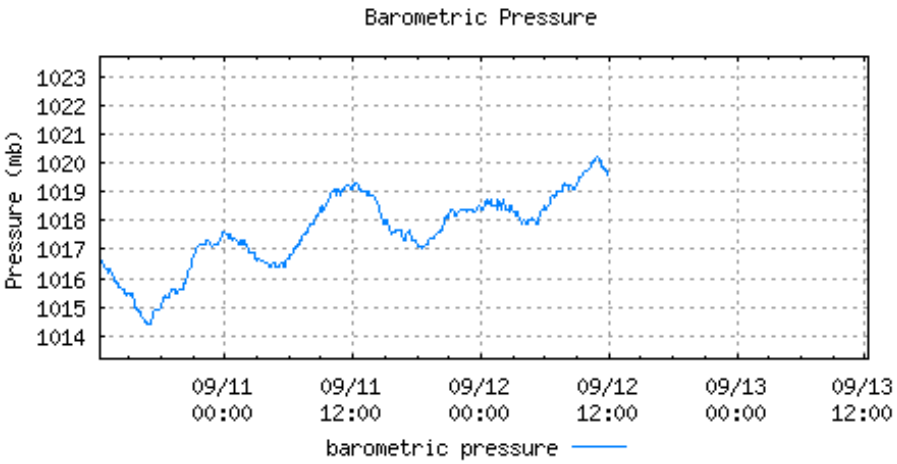
Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 0.42 ft. Predicted: -0.53 ft. Residual: 0.95 ft.
Historical Maximum Water Level: Oct 4 2015, 2.97 ft.
Next High Tide: 09/12/2018 22:21 (EDT), 0.43 ft.

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC



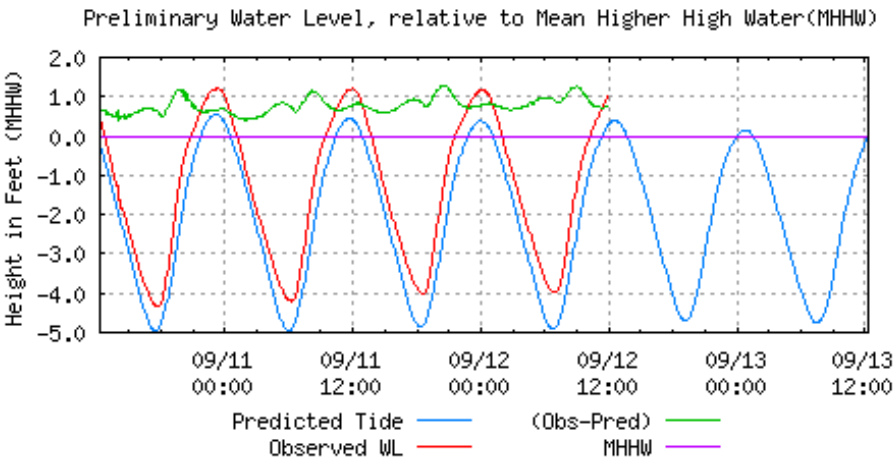
Last Observed Sample: 09/12/2018 12:06 (EDT)
Wind Speed: 16 knots Gusts: 17 knots Direction: 49° T

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC



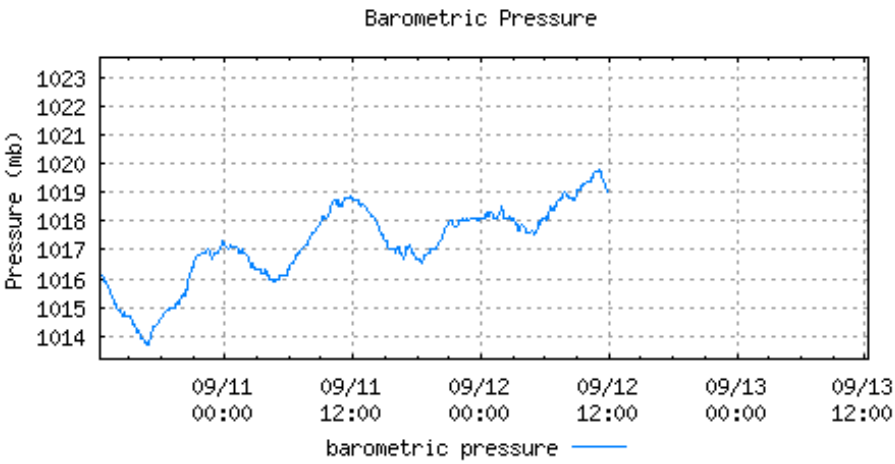
Last Observed Sample: 09/12/2018 12:06 (EDT)
Barometric Pressure: 1019.6 mb

NOAA/NOS/CO-OPS 8658120 Wilmington, NC



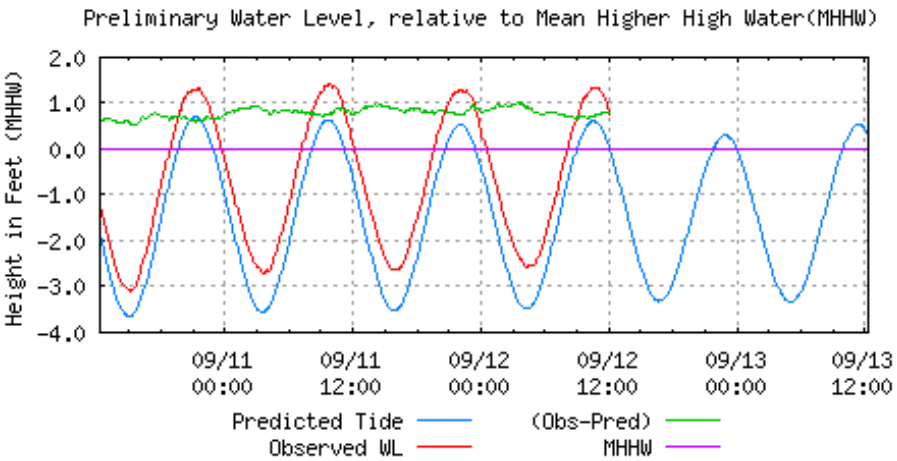
Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 1.08 ft. Predicted: 0.34 ft. Residual: 0.74 ft.
Historical Maximum Water Level: Oct 8 2016, 3.48 ft.
Next High Tide: 09/12/2018 12:32 (EDT), 0.39 ft.

NOAA/NOS/CO-OPS 8658120 Wilmington, NC



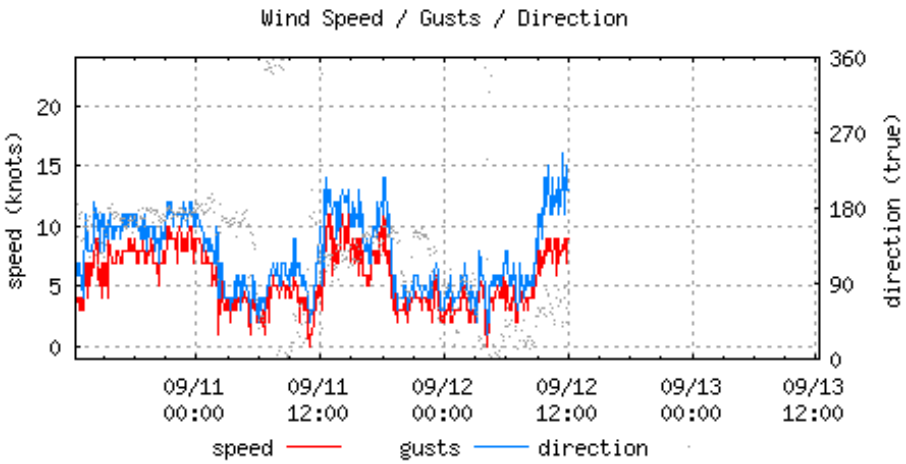
Last Observed Sample: 09/12/2018 12:06 (EDT)
Barometric Pressure: 1018.8 mb

NOAA/NOS/CO-OPS 8656483 Beaufort, Duke Marine Lab, NC



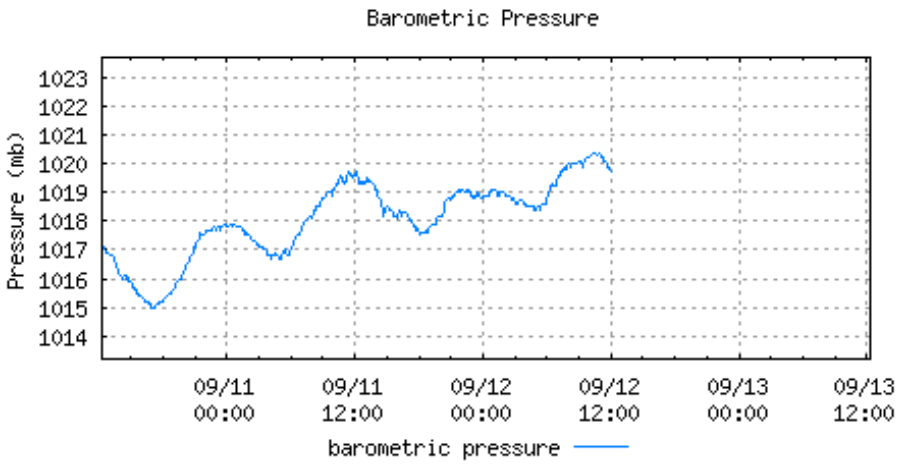
Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 0.75 ft. Predicted: -0.03 ft. Residual: 0.78 ft.
Historical Maximum Water Level: Sep 19 1955, 3.39 ft.
Next High Tide: 09/12/2018 22:53 (EDT), 0.30 ft.

NOAA/NOS/CO-OPS 8656483 Beaufort, Duke Marine Lab, NC



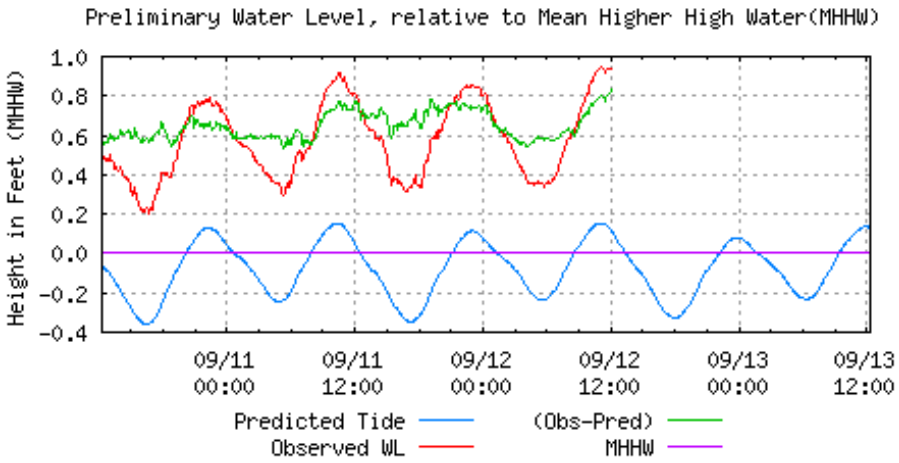
Last Observed Sample: 09/12/2018 12:06 (EDT)
Wind Speed: 9 knots Gusts: 13 knots Direction: 82° T

NOAA/NOS/CO-OPS 8656483 Beaufort, Duke Marine Lab, NC



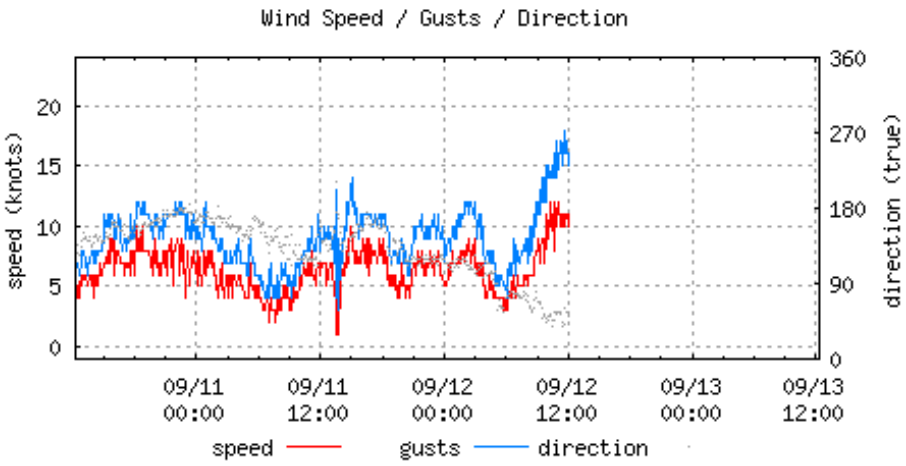
Last Observed Sample: 09/12/2018 12:06 (EDT)
Barometric Pressure: 1019.7 mb

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC



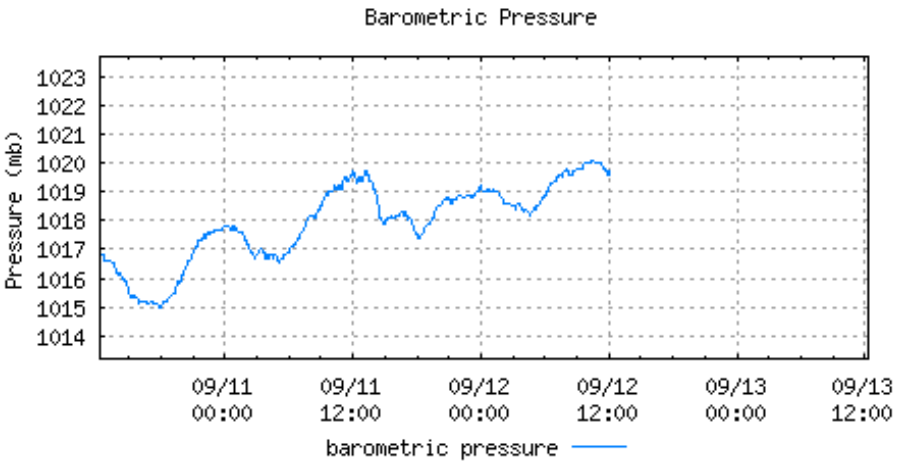
Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 0.94 ft. Predicted: 0.11 ft. Residual: 0.83 ft.
Historical Maximum Water Level: Oct 9 2016, 5.76 ft.
Next High Tide: 09/12/2018 23:49 (EDT), 0.08 ft.

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC



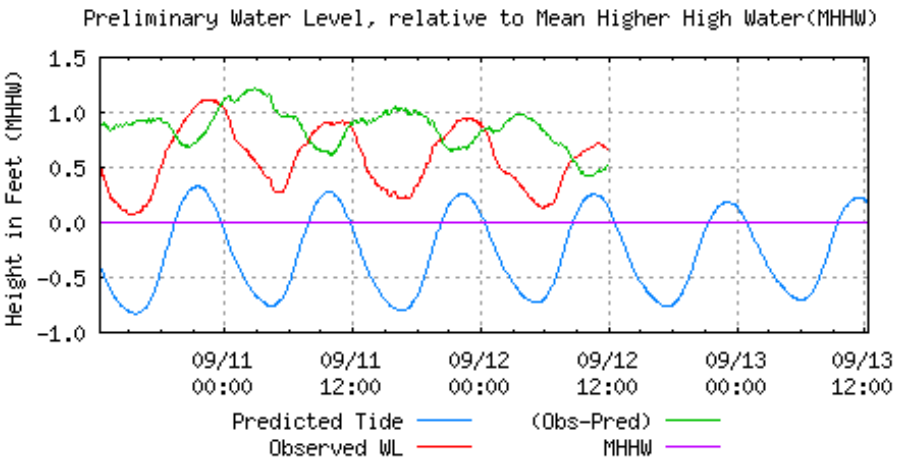
Last Observed Sample: 09/12/2018 12:06 (EDT)
Wind Speed: 11 knots Gusts: 15 knots Direction: 53° T

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC



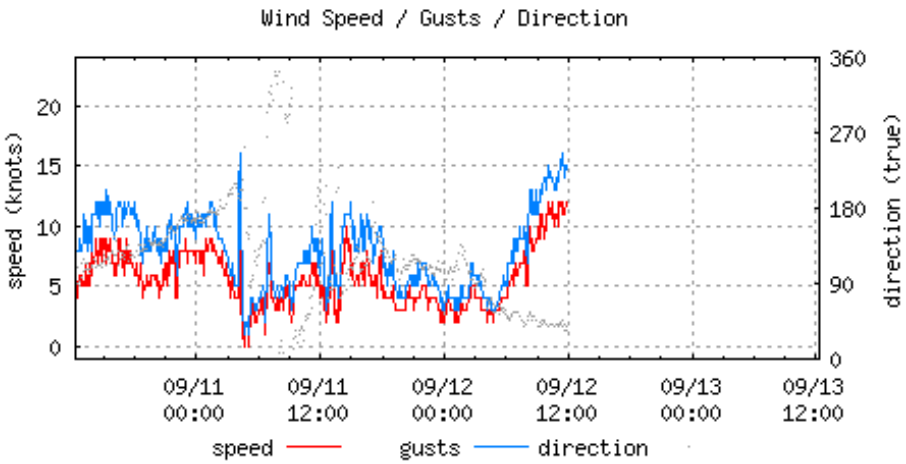
Last Observed Sample: 09/12/2018 12:06 (EDT)
Barometric Pressure: 1019.6 mb

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC



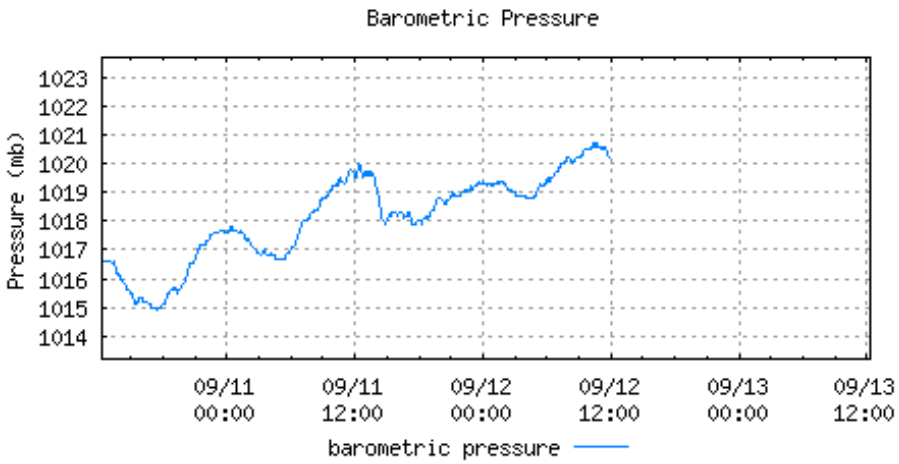
Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 0.63 ft. Predicted: 0.11 ft. Residual: 0.52 ft.
Historical Maximum Water Level: Aug 28 2011, 6.31 ft.
Next High Tide: 09/12/2018 23:08 (EDT), 0.18 ft.

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC



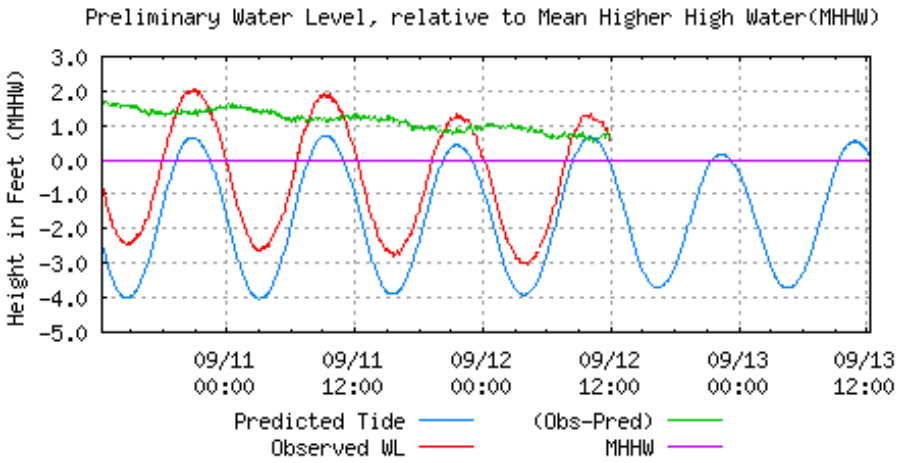
Last Observed Sample: 09/12/2018 12:06 (EDT)
Wind Speed: 12 knots Gusts: 15 knots Direction: 42° T

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC



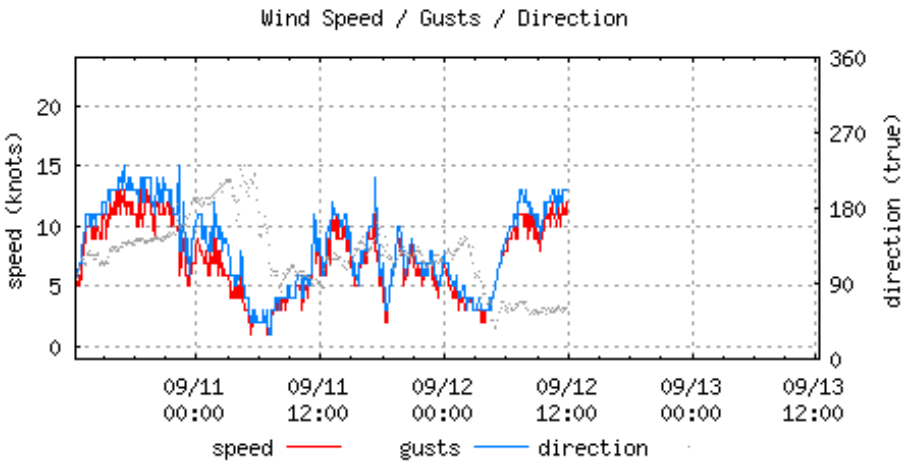
Last Observed Sample: 09/12/2018 12:06 (EDT)
Barometric Pressure: 1020.3 mb

NOAA/NOS/CO-OPS 8651370 Duck, NC



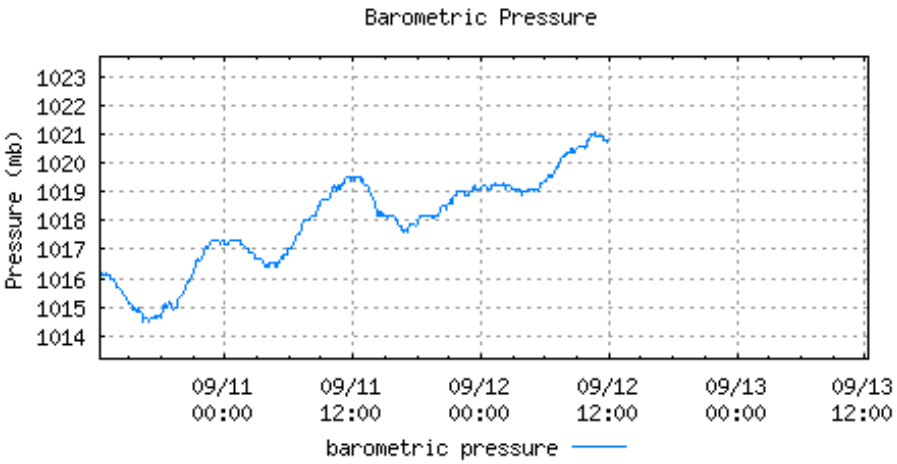
Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 0.53 ft. Predicted: -0.28 ft. Residual: 0.81 ft.
Historical Maximum Water Level: Sep 18 2003, 4.13 ft.
Next High Tide: 09/12/2018 22:21 (EDT), 0.17 ft.

NOAA/NOS/CO-OPS 8651370 Duck, NC



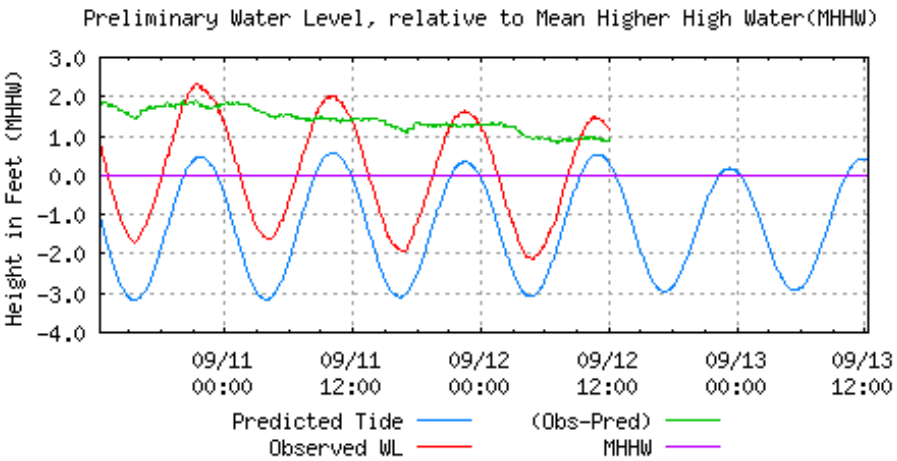
Last Observed Sample: 09/12/2018 12:06 (EDT)
Wind Speed: 12 knots Gusts: 13 knots Direction: 56° T

NOAA/NOS/CO-OPS 8651370 Duck, NC



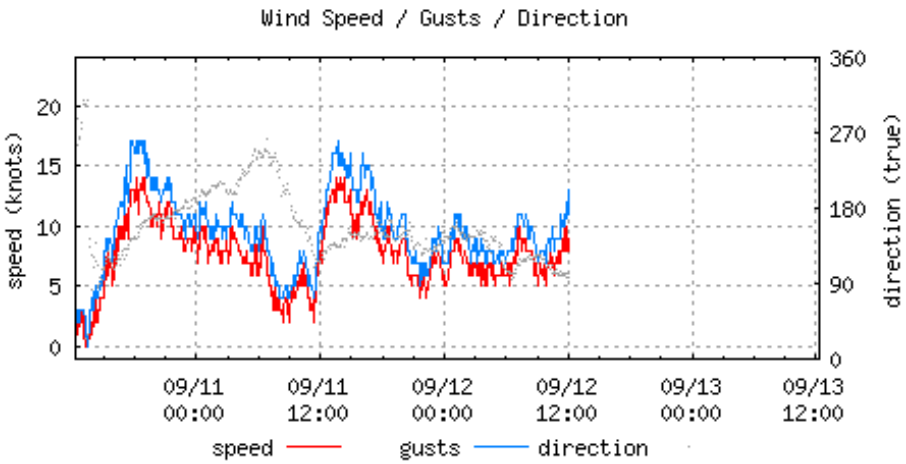
Last Observed Sample: 09/12/2018 12:06 (EDT)
Barometric Pressure: 1020.6 mb

NOAA/NOS/CO-OPS 8638901 CBBT, Chesapeake Channel, VA



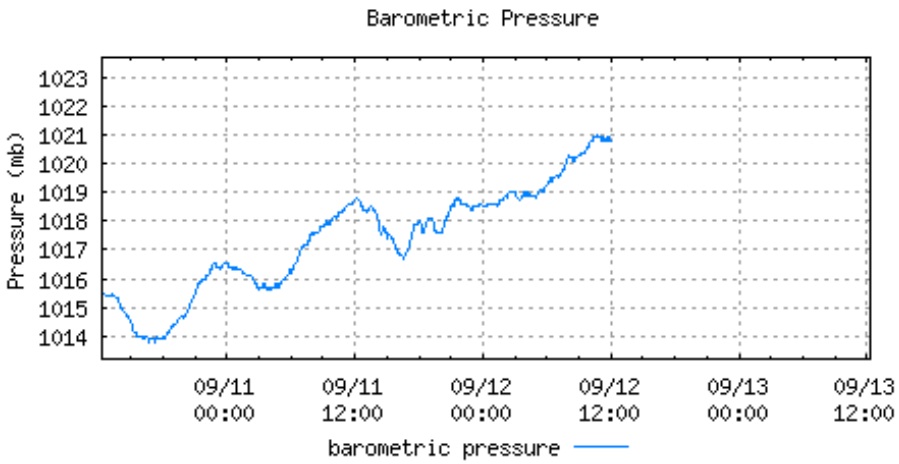
Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 1.20 ft. Predicted: 0.28 ft. Residual: 0.92 ft.
Historical Maximum Water Level: n/a
Next High Tide: 09/12/2018 23:17 (EDT), 0.17 ft.

NOAA/NOS/CO-OPS 8638901 CBBT, Chesapeake Channel, VA



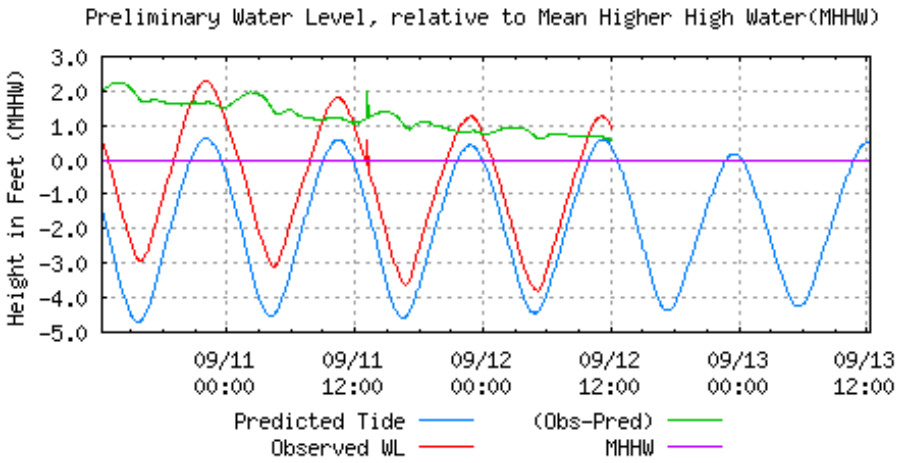
Last Observed Sample: 09/12/2018 12:06 (EDT)
Wind Speed: 8 knots Gusts: 13 knots Direction: 98° T

NOAA/NOS/CO-OPS 8638901 CBBT, Chesapeake Channel, VA



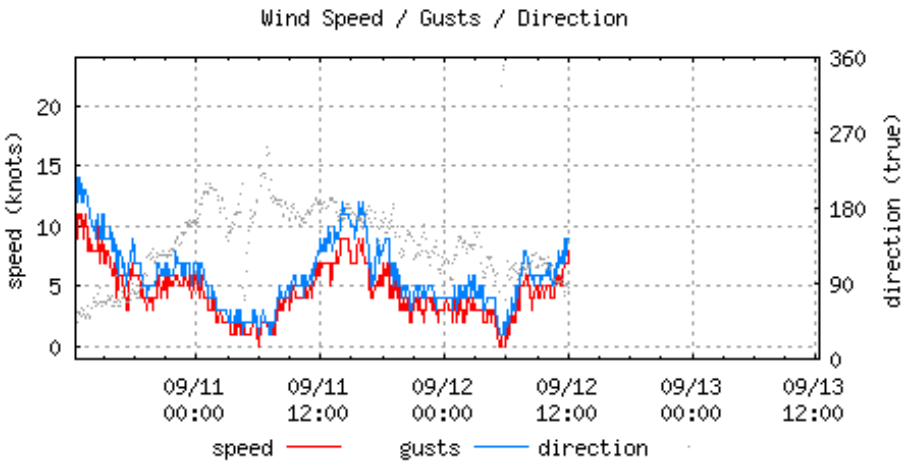
Last Observed Sample: 09/12/2018 12:06 (EDT)
Barometric Pressure: 1020.8 mb

NOAA/NOS/CO-OPS 8631044 Wachapreague, VA



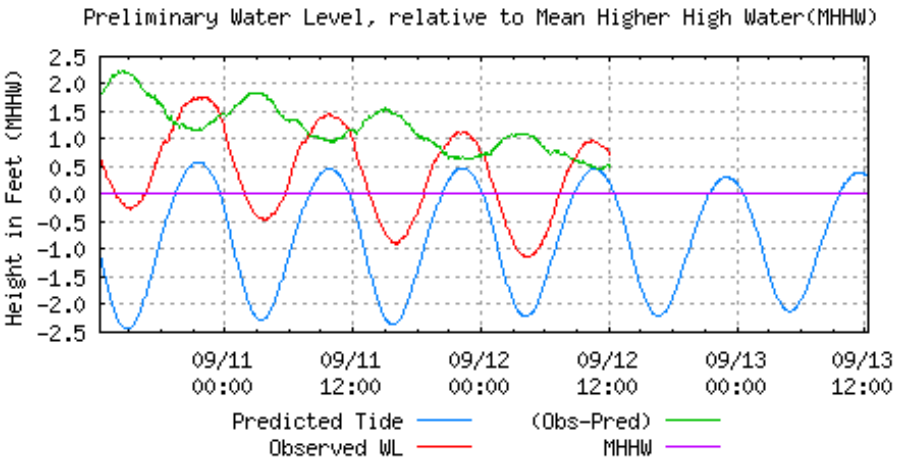
Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 0.92 ft. Predicted: 0.35 ft. Residual: 0.57 ft.
Historical Maximum Water Level: Feb 5 1998, 4.41 ft.
Next High Tide: 09/12/2018 23:33 (EDT), 0.18 ft.

NOAA/NOS/CO-OPS 8631044 Wachapreague, VA



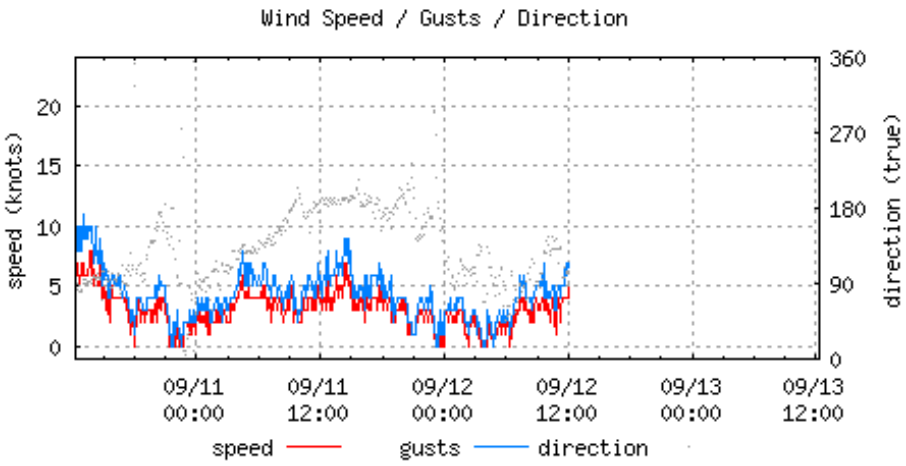
Last Observed Sample: 09/12/2018 12:06 (EDT)
Wind Speed: 8 knots Gusts: 9 knots Direction: 80° T

NOAA/NOS/CO-OPS 8570283 Ocean City Inlet, MD



Last Observed Sample: 09/12/2018 12:06 (EDT). Data relative to MHHW
Observed: 0.72 ft. Predicted: 0.19 ft. Residual: 0.53 ft.
Historical Maximum Water Level: Feb 5 1998, 3.61 ft.
Next High Tide: 09/12/2018 22:59 (EDT), 0.32 ft.

NOAA/NOS/CO-OPS 8570283 Ocean City Inlet, MD



Last Observed Sample: 09/12/2018 12:06 (EDT)

Wind Speed: 5 knots Gusts: 7 knots Direction: 87° T

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8670870	Fort Pulaski, GA	09/12/2018 12:06 (EDT)	0.76 ft	0.11 ft	0.65 ft	1.48 ft
8665530	Charleston, Cooper River Entrance, SC	09/12/2018 12:06 (EDT)	0.81 ft	0.06 ft	0.75 ft	1.44 ft
8662245	Oyster Landing (N Inlet Estuary), SC	09/12/2018 12:06 (EDT)	1.21 ft	0.34 ft	0.87 ft	1.40 ft
8661070	Springmaid Pier, SC	09/12/2018 12:06 (EDT)	0.13 ft	-0.56 ft	0.69 ft	1.53 ft
8658163	Wrightsville Beach, NC	09/12/2018 12:06 (EDT)	0.42 ft	-0.53 ft	0.95 ft	1.74 ft
8658120	Wilmington, NC	09/12/2018 12:06 (EDT)	1.08 ft	0.34 ft	0.74 ft	1.19 ft
8656483	Beaufort, Duke Marine Lab, NC	09/12/2018 12:06 (EDT)	0.75 ft	-0.03 ft	0.78 ft	1.35 ft
8654467	USCG Station Hatteras, NC	09/12/2018 12:06 (EDT)	0.94 ft	0.11 ft	0.83 ft	0.95 ft
8652587	Oregon Inlet Marina, NC	09/12/2018 12:06 (EDT)	0.63 ft	0.11 ft	0.52 ft	0.95 ft
8651370	Duck, NC	09/12/2018 12:06 (EDT)	0.53 ft	-0.28 ft	0.81 ft	1.35 ft
8638901	CBBT, Chesapeake Channel, VA	09/12/2018 12:06 (EDT)	1.20 ft	0.28 ft	0.92 ft	1.65 ft
8631044	Wachapreague, VA	09/12/2018 12:06 (EDT)	0.92 ft	0.35 ft	0.57 ft	1.27 ft
8570283	Ocean City Inlet, MD	09/12/2018 12:06 (EDT)	0.72 ft	0.19 ft	0.53 ft	1.15 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce